



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/250,287	02/16/1999	MAX AARON SOLONDZ	2925-0217P	1880

30594 7590 04/24/2003

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER

MILORD, MARCEAU

ART UNIT	PAPER NUMBER
----------	--------------

2682

DATE MAILED: 04/24/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/250,287

Applicant(s)

SOLONDZ, MAX AARON

Examiner

Marceau Milord

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12,14-22,24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-12,14 and 15 is/are allowed.
- 6) ☒ Claim(s) 16-22,24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-22, 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sporre (US Patent No 5966657) in view of Genell et al. (US Patent No 6122505).

Regarding claim 16, Sporre discloses a method of making operational measurements in a wireless communication system (figs. 1-3) comprising: sending a measurement request from one of a first base station (B 1 of fig. 1) to at least a second base station (B9 of fig. 1), said measurement request requesting (It is considered that the base station B9 orders mobile station M3 of fig. 1 to make periodic signal quality measurements on the downlink BCCH channels; col. 7, lines 5- 67) said base station to make operation measurements of at least one signal transmitted by said first base station (the mobile station M3 or M6 measures systematically the signal quality on each of the frequency channels it has been ordered by the base station B 1 to measure via the system 5 information sent on the SACCH ; col. 11, lines 1 - 61) ; and making (M1- M10 of fig. 1; these measurements are regularly made and reported back to the base station and network which uses it to construct a list of neighboring cells which are candidates for possible hand-off, col. 8, lines 1- 31 ; col. 10, line 3- col. 11, line 63). However, Sporre does not specifically disclose a second base station transmitting a measurement instruction to the mobile

Art Unit: 2682

terminals in response to the measurement request. On the other hand, Wallstedt et al, from the same field of endeavor, discloses a method and system utilizes signal measurements performed within the coverage area of a cell to create the neighbor cell list for that cell. The mobile station measures signal strength on the digital communication channel used for the established connection and the bit error rate on the established connection; then, the mobile station transmits its measurements to the base station. The base station also measures signal strength on the digital communication channel used for the established connection and the bit error rate on the established connection. The base station processes and analyzes the results of its own measurements and the measurements of the mobile station for comparison with handoff criteria. If the received signal strength on the current channel falls below the received signal strength on a measurement channel of a neighboring cell the MSC initiates handoff to that neighboring cell (col. 2, lines 30- 67; col. 4, lines 28- 66; col. 7, line 20- col. 8, line 52). Furthermore, Wallstedt also shows in figure 4C, a measurement process where the results of the signal measurements are used to reconfigure an existing neighbor cell list to include the best candidate cells for handoff. In addition, the measurement results are checked to determine if cells should be added to or deleted from the existing neighbor cell list (col. 10, line 18 - col. 11, line 67). Wallstedt also shows a flow diagram where at step 619, a measurement process begins as the MSC sends the base station and mobile station measurement lists to the base station; the mobile station measurement list will then be further transmitted to the mobile station from the base station. At step 622 the MSC receives an input where it is either a set of measurements results from a mobile station or a base station or, a neighbor cell list signal. Then, at step 634 the measurements results are stored; the process moves to step 626 where the stored measurement results are

Art Unit: 2682

averaged to create an average interference level for each measurement channel (figs. 4A- C, col. 11, line 12 col. 12, line 46; col. 17, line 21- col. 18, line 48). The other base stations themselves can make or instruct the mobile terminals in their coverage areas to make the operational measurements in response to a request from the base station of interest as claimed (figs. 7-9, col. 14, line 4- col. 15, line 67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this signal strength measurement techniques of Wallstedt to the communication system of Sporre in order to make operational measurements along with signal quality measurements of channels from the serving base station as well as signal quality measurements for channels from other base stations.

On the other hand, Genell et al, from the same field of endeavor, discloses a method for testing a base station, which comprises the steps of operating one of the base stations as a testing base station, while operating another one as a testing base station. In addition, received signal quality parameter at the tested base station is measured, and the measured received signal quality parameter is reported to a central controller (col. 2, line 35- col. 3, line 19; col. 6, lines 25-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this signal strength measurement techniques of Genell to the modified system of Wallstedt and Sporre in order to make operational measurements along with signal quality measurements of channels from the serving base station as well as signal quality measurements for channels from other base stations.

Regarding claim 17, Sporre as modified discloses a method (fig. 1) of sending (MIM 10 of fig. 1) said received results (col. 10, lines 9- 51) to a main controller (the mobile station

Art Unit: 2682

M3 or M6 measures systematically the signal quality on each of the frequency channels it has been ordered by the base station B 1 to measure via the system 5 information sent on the SACCH col. 11, lines 1 - 61).

Regarding claims 18, 22, Sporre as modified discloses a method wherein said signal transmitted from said first base station (BI-B10 of fig. 1; col. 8, lines 32- 65) is transmitted at a constant power level (col. 11, lines 5- 63).

Regarding claim 19, Sporre as modified discloses a method wherein said signal transmitted from said first base station is a forward control channel signal (cot. 5, line 2- cot. 6, line 20; cot. 7, line 34- col. 8, line 55).

Regarding claim 20, Sporre as modified discloses a method wherein said wireless communication system is a code division multiple access system and said signal transmitted from said first base station is a pilot signal (col. 5, line 4 - cot. 6, line 20; col. 7, line 5- cot. 8, line 65).

Regarding claim 21, Sporre as modified discloses a method wherein said signal is one of a reserved or dummy channel (col. 8, line 32- cot. 10, line 51).

Regarding claim 24, Sporre as modified discloses a method wherein said step of sending a measurement request (col. 11, lines 1 - 61) from said first base station to said second base station via a main controller (col. 7, line 5- col. 8, line 65), said measurement request instructing said main controller to send said measurement request to said second base station col. 11, lines 1 - 61).

Regarding claim 25, Sporre as modified discloses a method (figs. 5-7) wherein said operational measurements includes at least one of signal strength (col. 11, lines 11- 58),

Art Unit: 2682

signal-to-noise ratio, frame error rate and bit error rate of said signal transmitted from said first base station as received at said mobile terminals (col. 13, line 1- col. 14, line 36) in communication with said base station (col. 16, line 27- col. 17, line 21).

Allowable Subject Matter

Claim 1 is allowed.

Response to Arguments

Applicant's arguments with respect to claims 16-22, 24-25 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 703-306-3023. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 703-308-6739. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-305-9508 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


MARCEAU MILORD

April 19, 2003

Application/Control Number: 09/250,287

Page 7

Art Unit: 2682